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(54) COMPUTER CONTROLLED PAGING AND TELEPHONE COMMUNICATION SYSTEM AND METHOD

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88.21, 70, 74, 93.35, 142.08, 170, 179, 201.01, 201.07, 208.01, 209.01, 214.01, 215.01; 455/31.2, 461, 445, 417

(56) References Cited

U.S. PATENT DOCUMENTS

2.272.947 A	12/1942	Nilsson 340/825.4
2,957,047 A		Wennemer 379/211
2,966,554 A		Dubois
3,178,516 A	-	Bonanno 379/211
3,182,134 A		Hochgraf 379/112

3,506,791 A	4/1970	Halaby 174/50
3,614,328 A	10/1971	McNaughton et al.
3,627,955 A	12/1971	Stone
3,676,603 A	7/1972	Budrys et al 379/355

(List continued on next page.)

FOREIGN PATENT DOCUMENTS

DE.	2542834	11/1976
DE	2522758	12/1976
DE	2929961	2/1981
DE	3411206	10/1985

(List continued on next page.)

OTHER PUBLICATIONS

CCITT Paper. "Universal Personal Telecommunication Definition and Attributes" Oct. 1989.

R.M. Fuller Co. Telexpand System 1. "Advanced Operations Manual" Appen. J. 1985.

Excerpt from Aspect Call Center "Workstation User's Guide" Release 1.0 pp. 110-119, 1987, with excerpts from a Release 2.0 of "Workstation User's Guide" pp. 78, 89-91 May 1988.

(List continued on next page.)

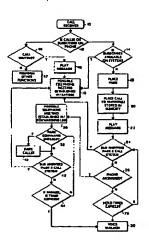
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57) ABSTRACT

The invention provides a method and an apparatus for placing a caller into telecommunication with a subscriber. A call from the caller, directed to the subscriber, is detected and, in response thereto, a page is initiated to the subscriber and at the same time a forward leg call is initiated to a stored telephone address. If the call on the forward leg is answered, the party answering that call is placed in telecommunication with the caller. A call from the subscriber is also detected the subscriber is placed in telecommunication with the caller together with any party on a forward leg call.

32 Claims, 19 Drawing Sheets

Microfiche Appendix Included (2 Microfiche, 157 Pages)





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United States Patent [19]

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[11] Patent Number:

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[54]	ADJUNCT CONTROLLER FOR A
	TELEPHONE SYSTEM

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[*] Notice: The term of this patent shall not extend

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Related U.S. Application Data

[62] Division of Ser. No. 249,453, May 26, 1994, Pat. No. 5,673,299, which is a division of Ser. No. 480,242, Feb. 15, 1990, Pat. No. 5,375,161, which is a continuation-in-part of Ser. No. 439,601, Nov. 21, 1989, abandoned, which is a continuation-in-part of Ser. No. 841,931, Mar. 20, 1986, Pat. No. 4,893,335, which is a continuation-in-part of Ser. No. 650,821, Sep. 14, 1984, abandoned.

[51]	Int. Cl.6	***************************************	H04M 3/42; H04M 1/00;
			H04M 1/56: H04M 15/06

[56] References Cited

U.S. PATENT DOCUMENTS

3,676,603	7/1972	Budrys et al	379/217
3,739,329	6/1973	Lester	379/201
3.854.013	12/1974	Altenburger et al	379/211

(List continued on next page.)

FOREIGN PATENT DOCUMENTS

0046623 3/1982 European Pat. Off. .

0152908	8/1985	European Pat. Off
0216515	9/1985	European Pat. Off
0216381	4/1987	European Pat. Off
0330441	8/1989	European Pat. Off
2541020	2/1983	France.
2929961	2/1981	Germany .
3411206	10/1985	Germany .
2198910	6/1988	United Kingdom .
8304451	12/1983	WIPO.

OTHER PUBLICATIONS

Applied Voice Technology product reference guide for "Call Xpress 200 and 400 Series", Feb. 1989.

Applied Voice Technology user guide for "Call Xpress", Nov. 1989.

"SR 19000 PBX Digital Private Branch Exchange Product Reference Guide"; Solid State Systems, Inc., Nov. 1987. (NEC Corp.) Patent Abstracts of Japan, vol. 13, No. 435. (NEC Corp.) Patent Abstracts of Japan, vol. 12, No. 414. (Fujitsu Ltd.) Patent Abstracts of Japan, vol. 5, No. 70. (Fujitsu KK) Patent Abstracts of Japan, vol. 7, No. 288. IBM Technical Disclosure Bulletin vol. 26, No. 5, D. Zeheb "Secretarial Branch Exchange".

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57] ABSTRACT

A telephone system for providing enhanced telephone services. The system includes a telephone switch servicing a plurality of telephone subscribers via communication facilities of the switch, which facilities hande both voice and data communications. A telephone switch controller is coupled to the switch for controlling the switch to provide an enhanced service not otherwise available in the switch. The controller communicates with the switch using data in the form of switch functions. The controller includes a memory for storing a sequence of switch functions, swhich sequence defines the enhanced service. The controller communicates a prompt to a caller in response to a telephone call placed by the caller to a predetermined telephone address associated with a subscriber and communicates the sequence of switch functions stored in the memory to the switching system in response to a command received from the caller to provide the enhanced service.

14 Claims, 55 Drawing Sheets

